02-10-2023 DAY 4 (2105A41131)

Check whether the numbers from 1 to 9 is the sum of row or column or diagonal wherever the number is placed in the matrix

Possibilities are:

|  |  |  |
| --- | --- | --- |
| 8 | 1 | 6 |
| 3 | 5 | 7 |
| 4 | 9 | 2 |
| 4 | 9 | 2 |
| 3 | 5 | 7 |
| 8 | 1 | 6 |

|  |  |  |
| --- | --- | --- |
| 6 | 1 | 8 |
| 7 | 5 | 3 |
| 2 | 9 | 4 |
| 2 | 9 | 4 |
| 7 | 5 | 3 |
| 6 | 1 | 8 |

|  |  |  |
| --- | --- | --- |
| 8 | 3 | 4 |
| 1 | 5 | 9 |
| 6 | 7 | 2 |
| 6 | 7 | 2 |
| 1 | 5 | 9 |
| 8 | 3 | 4 |

MAGIC SQUARE:

C program:

#include<stdio.h>

#include<conio.h>

main()

{

int i,c,n,r;

printf("Enter the range of magic square\n");

scanf("%d",&n);

int arr[n][n];

for(i=1;i<=n\*n;i++)

{

r=(n-i%n+1+2\*((i-1)/n))%n;

c=((n-1)/2+i-1-(i-1)/n)%n;

arr[r][c]=i;

}

for(r=0;r<n;r++)

{

for(c=0;c<n;c++)

{ OUTPUT: 3

printf("%d\t",arr[r][c]); 8 1 6

} 3 5 7

printf("\n"); 4 9 2

}

return 0;

}